

BC1524 and BC3012 Automatic Battery Chargers



- **Heavy duty float charging:
15A (24V) or 30A (12V) output**
- **Simple, low cost design**
- **Lead acid or Ni-Cd calibrations**
- **Float or boost modes**
- **Charge fail relay output**

Description

The BC1524 and BC3012 range provides fully automatic, heavy duty charging of vented lead acid or NiCd batteries. The units may be used in a wide range of industrial charging applications, including standby engines, pumps and generators.

The charger uses an open frame construction, designed for surface mounting in an enclosed panel. Each unit consists of a transformer, rectifier and control circuit. The control circuit ensures that charger maintains the battery voltage at the pre-calibrated float level, while supplying any additional load current up to the specified maximum.

A 'boost' mode of operation may be used to provide increased voltage output. Selection of normal or boost mode is via three terminals, allowing activation by a remote panel switch or time relay – see calibration table overleaf for details of float and boost voltages.

A self diagnostic 'charge fail' circuit and relay output is provided as standard. The volt free relay de-energises in the event of a charging fault.

Electrical connection of the AC supply, DC output and charge fail relay is via shrouded screw terminals. The AC supply connection features multiple transformer tapings to allow exact matching of the supply voltage: 240V units allow connection of 220, 240, 250 or 270 VAC power supplies; 110V variants permit 110, 120, 125 or 135 VAC supplies. Connection of the float/boost selector link is via shrouded 6mm blade connectors.

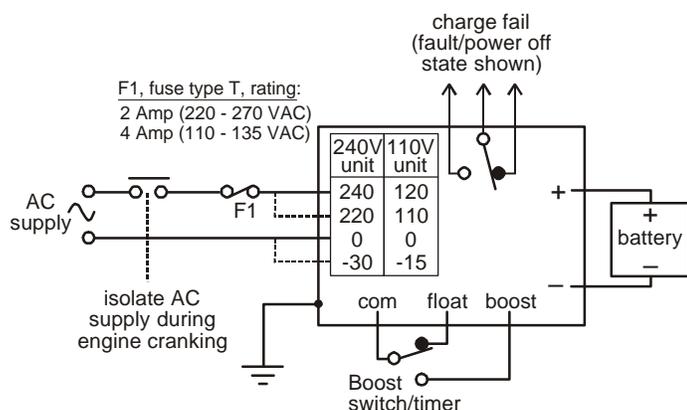
Product Specification

Power supply:	BC1524	BC3012
nominal operating voltages	110/120/125/135 VAC (110V units) 220/240/250/270 VAC (240V units)	
permissible voltage variation	± 6% of nominal	
nominal operating frequency	50/60 Hz.	
DC charge output:		
maximum current, A DC	15	30
nominal voltage, V DC	24	12
float/boost voltages	see table overleaf	
Charge fail output:		
relay type	volt free SPDT contacts, relay de-energised on fault	
contact rating	1A @ 30 VDC (resistive load)	
General:		
operating temperature	-10 to +55 °C	
overall dimensions (w x h x d)	185 x 175 x 135 mm	
weight	approx. 7.8 Kg	

Warranty

A two year limited warranty on materials and workmanship is given with this Murphy product. Details are available on request and are packed with each unit.

Electrical connection



Notes:

- 1) battery output is isolated from chassis
- 2) chassis must be connected to a low impedance earth

Calibration

Battery type*		float volts (VDC)	boost volts (VDC)
12V	Lead acid (6 cells)	13.6	14.1
	Ni-Cd (10 cells)	14.2	14.7
24V	Lead acid (12 cells)	27.2	28.2
	Ni-Cd (18 cells)	25.6	26.6
	Ni-Cd (20 cells)	28.4	29.4

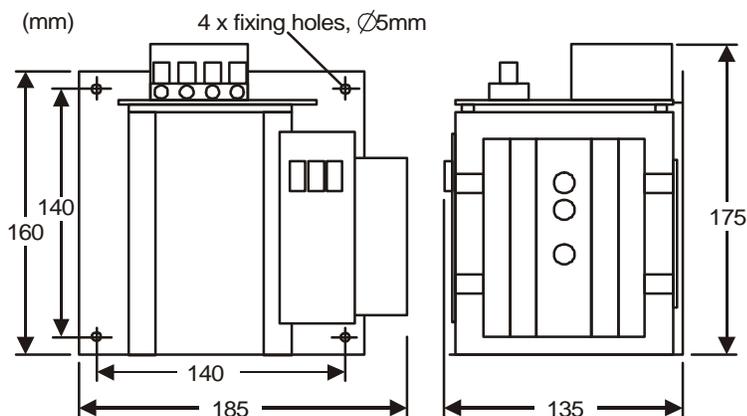
*Note: the BC1524/BC3012 range is designed for use with vented batteries only. These chargers are NOT suitable for valve regulated lead acid (VRLA) or sealed type cells.

How to order

When ordering, please specify:-

Stock Number	Model	Supply voltage, calibration
41.70.0102	BC1524/CLA	110VAC, 24V lead acid
41.70.0103	BC1524/CNC18	110VAC, 18 cell NiCd
41.70.0104	BC1524/CNC20	110VAC, 20 cell NiCd
41.70.0105	BC1524/DLA	240VAC, 24V lead acid
41.70.0106	BC1524/DNC18	240VAC, 18 cell NiCd
41.70.0107	BC1524/DNC20	240VAC, 20 cell NiCd
41.70.0108	BC3012/CLA	110VAC, 12V lead acid
41.70.0109	BC3012/CNC10	110VAC, 10 cell NiCd
41.70.0110	BC3012/DLA	240VAC, 12V lead acid
41.70.0111	BC3012/DNC10	240VAC, 10 cell NiCd

Dimensions



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In order to consistently bring you the highest quality, full featured products, we reserve the right to change our specifications and designs at any time.